

Application No.: 10/563,455
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AMENDMENTS TO THE CLAIMS

1. **(Previously Presented)** A method for providing a fibre-containing pectin product from a plant material, said method comprising the steps of:
 - (i) providing an *in situ* reaction system by swelling the plant material in an aqueous solution, wherein said aqueous solution comprises at least one salt;
 - (ii) subjecting pectin present in the swollen plant material from step (i) to a de-esterification treatment in the presence of an alkaline reagent; and
 - (iii) separating the de-esterified fibre-containing pectin product.
2. **(Original)** The method according to claim 1, wherein the aqueous solution does not contain an organic solvent.
3. **(Previously Presented)** The method according to claim 1, wherein the plant material is swelled in the aqueous solution for 1 to 120 minutes.
4. **(Previously Presented)** The method according to claim 1, wherein the plant material is swelled in the aqueous solution at a temperature in the range of 0-120°C.
5. **(Previously Presented)** The method according to claim 1, wherein the plant material is swelled in the aqueous solution providing a dry matter content of the plant material in a range from 1-50%.
6. **(Previously Presented)** The method according to claim 1, wherein the amount of the at least one salt corresponds to a salt concentration from 1 mmol to 30 mmol per gram of plant material dry matter.
7. **(Previously Presented)** The method according to claim 1, wherein the aqueous solution is an inorganic aqueous solution.
8. **(Currently amended)** The method according to claim 1, wherein the at least one salt is a water- soluble and or neutral salt.

9. (Currently amended) The method according to claim 8, wherein the water-soluble and/or or neutral salt is selected from the group consisting of sodium salts, potassium salts, calcium salts, chloride salts, and nitrate salts and mixtures thereof.

10. (Currently amended) The method according to any one of claims 1-9-claim 4 claim 1, wherein the de-esterification treatment is continued for 1 to 120 minutes.

11. (Previously Presented) The method according to claim 1, wherein the de-esterification treatment is performed at a temperature in the range of 0-120°C.

12. (Previously Presented) The method according to claim 1, wherein the de-esterification treatment is performed with a dry matter content of the plant material in a range from 1-50%.

13. (Canceled).

14. (Currently Amended) The method according to claim 1, wherein the alkaline reagent provided in step (ii) results in a pH between 7 and 14 above 10.

15. (Currently amended) The method according to claim 1, wherein the alkaline reagent is selected from the group consisting of ammonia, a low molecular weight amine, a low molecular weight diamine, a low molecular weight amino acid, sodium hydroxide, potassium hydroxide, calcium hydroxide and an organic base hydroxide.

16. (Previously Presented) The method according to claim 1, wherein the amount of alkaline reagent is from 20 mmol to 80 mmol of basic reagent per gram of pectin-containing plant dry matter.

17. (Previously Presented) The method according to claim 1, wherein the plant material is further subjected to an amidation treatment.

18. **(Previously Presented)** The method according to claim 17, wherein the amidation treatment comprises addition of an amidation reagent selected from the group consisting of ammonia, a low molecular weight amine, a low molecular weight diamine and a low molecular weight amino acid.

19. **(Previously Presented)** The method according to claim 17, wherein the swollen plant material obtained in step (i) is treated with the amidation reagent for 1 to 120 minutes.

20. **(Previously Presented)** The method according to claim 17, wherein the swollen plant material obtained in step (i) is treated with the amidation reagent at a temperature in the range of -15 to 75°C.

21. **(Currently amended)** The method according to claim 1, wherein the separated and de-esterified fibre-containing product obtained in step (iii) is subjected to at least one washing step and/or or at least one pressing step to obtain the fibre-containing pectin product.

22. **(Currently amended)** The method according to claim 21, wherein the washed and/or or pressed fibre-containing pectin product is dried to a dry matter content of at least 90% by weight.

23. **(Currently amended)** The method according to any claim 1, wherein the fibre-containing pectin product has a degree of esterification from 0-80°C.

24. **(Previously Presented)** The method according to claim 1, wherein the fibre-containing pectin product has a degree of amidation of not more than 95%.

25. **(Previously Presented)** The method according to claim 1, wherein the fibre-containing pectin product obtained in step (iii) has a dry matter content of at least 1% (w/w) of the dry matter.

26. **(Previously Presented)** The method according to claim 1, wherein the plant material is obtained from a native vegetable material in a fresh or dried state.

27. **(Currently amended)** The method according to claim 1, wherein the plant material is selected from the group consisting of potato pulp, sugar beet pulp, pomace residues from apples, and peels or pulp from citrus fruits, and pulp from citrus fruits.

28. **(Previously Presented)** A fibre-containing pectin product produced by the method according to claim 1.

29. **(Previously Presented)** The product according to claim 28, wherein the fibre content present in the product is at least 1% (w/w) of the dry matter.

30. **(Previously Presented)** A method for providing a pectin product, said method comprising the steps of:

- (i) providing a fibre-containing pectin product according to claim 28;
- (ii) adding an extraction medium to the fibre-containing pectin product providing an extraction suspension;
- (iii) adjusting the pH of the extraction suspension to a pH in the range of 1-12;
- (iv) adjusting the temperature of the extraction suspension to a temperature in the range of 0-120°C; and
- (v) isolating the pectin product from the aqueous phase of the extracting medium.

31. **(Previously Presented)** The method according to claim 30, wherein the extraction medium has a pH in the range of 1-6.

32. **(Previously Presented)** The method according to claim 30, wherein the temperature is in the range of 40-100°C.

33. **(Previously Presented)** The method according to claim 30, wherein the pectin product is isolated by a method selected from the group consisting of precipitation, extraction, centrifugation, filtration, chromatography and drying.

34. **(Previously Presented)** A pectin product produced by the method according to claim 30.

35. **(Currently amended)** The product according to claim 34, wherein said product has a viscosity of at least 40 cp when mixed in a concentration of at most 1% (w/w) of pectin in a solution and measured by using a citric/citrate buffer and in a Hake Rheostress 1 viscosimeter, as defined in method A, and/or or has a viscosity, which is at least 2 times higher than the viscosity of conventional pectin products when mixed in a concentration of at most 1% (w/w) of pectin in a solution and measured by using a citric/citrate buffer and in a Hake Rheostress 1 viscosimeter, as defined in method A.

36. **(Previously Presented)** A product comprising pectin, wherein said product has a viscosity of at least 40 cp when mixed in a concentration of at most 1% (w/w) of pectin in a solution and measured by using a citric/citrate buffer and in a Hake Rheostress 1 viscosimeter as defined in method A, and/or has a viscosity which is at least 2 times higher than the viscosity of conventional pectin products when mixed in a concentration of at most 1% (w/w) of pectin in a solution and measured by using a citric/citrate buffer and in a Hake Rheostress 1 viscosimeter as defined in method A.

37. **(Previously Presented)** The product according to claim 36, wherein the product has a viscosity of at least 30 cp when mixed in a concentration of at most 1% (w/w) of pectin in a solution.

38. **(Previously Presented)** The product according to claim 36, wherein the product has a viscosity which is at least 2.5 times higher than conventional pectin products.

39. **(Currently amended)** The product according to any one of claims 36-38-claim 36 claim 36, wherein the pectin has a degree of esterification from 0-80, such as from 0-50, e.g. from 2-50, such as from 2-45, e.g. from 2-40, such as from 5-50, e.g. from 10-50 and/or or a degree of amidation of not more than 95% e.g.-not more than 75%, such as not more than 60%;

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~~not more than 50%, such as not more than 40%, e.g. not more than 30%, such as not more than 25%, e.g. not more than 20%.~~

40. **(Previously Presented)** A method for encapsulating an easily volatile lipid, water-soluble aromatic agent, water-soluble colouring agent, micronutrient, flavoring agent or vitamin, comprising providing a pectin product according to any one of claims 28, 34, or 36, and encapsulating said easily volatile lipid, water-soluble aromatic agent, micronutrient, flavoring agent or vitamin in said pectin product.

41. **(Currently amended)** A pharmaceutical composition comprising the product according to claims 28 or 34 any one of claims 28, 34 or 36.

42. **(Currently amended)** A viscosifying agent and/or an emulsifying agent comprising a product according to claims 28 or 34 any one of claims 28, 34 or 36.

43. **(Currently amended)** A fat replacement or tobacco replacement comprising the product according to claims 28 or 34 any one of claims 28, 34 or 36.